FY 2009 Capital Budget TPS Report 50776

Agency: Commerce, Community and Economic Development

Grants to Named Recipients (AS 37.05.316)

Grant Recipient: Fairbanks Economic Development

Corporation

Project Title:

Fairbanks Economic Development Corporation - Synthetic Fuel Design Engineering

State Funding Requested: \$ 300,000 House District: 10 - E

Future Funding May Be Requested

Brief Project Description:

Design engineering phase of a project to establish synthetic fuel gasifiers

Funding Plan:

Total Cost of Project: \$500,000

<u>Funding Secured</u> <u>Other Pending Requests</u> <u>Anticipated Future Need</u>

Amount FY Amount FY Amount FY

Local Funds \$200,000 2009

Total \$200,000

Detailed Project Description and Justification:

A community task force in Fairbanks has completed analysis identifying possible energy solutions to help mitigage crippling high energy costs in Interior Alaska. Once significant reduction in energy cost was shown to be the construction of carbon-based-fuel gasifier which produced syngas (carbon monoxide and hydrogen), and heat. Output from such units could feed existing combustion turbines, steam turbines coupled to electric generators, and/or could feed new suitably-chosen electric generation units. The syngas could also feed a Fischer-Tropsch (FT) plant for the production of synthetic liquid petroleum fuels.

The task force's financial analysis of the gasifier option shows an incremental reduction in electrical costs in excess of 50%, and a reduction in (FT) diesel fuel in excess of 30%, with locally - available coal as the initial fuel and biomass co-feed at a later time as it becomes available and feasible. Using this energy model, the residential energy bill could be reduced by 23%.

The task force, established through the Fairbanks Economic Development Corporation, is now entering the design engineering stage of the project. The projected cost of this phase is \$500,000, with a request of funding from the State of Alaska of \$300,000.

Project Timeline:

2008

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FY 2009 Capital Budget TPS Report 50776

Entity Responsible for the Ongoing Operation and Maintenance of this Project: Fairbanks North Star Borough

Grant Recipient Contact Information:

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Page 2

Has this project been through a public review process at the local level and is it a community priority? X Yes No

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4:28 PM 4/29/2008